COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT
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TOM BURNS, PLANNING DIRECTOR

NOTICE OF ENVIRONMENTAL REVIEW PERIOD

SANTA CRUZ COUNTY

APPLICANT: **Santa Cruz County, Resource Conservation District, for Dana & Carol Izzarelli**

APPLICATION NO.: **06-0041**

APN: **095-181-15 & 097-201-06**

The Environmental Coordinator has reviewed the Initial Study for your application and made the following preliminary determination:

XX Negative Declaration
(Your project will not have a significant impact on the environment.)

XX Mitigations will be attached to the Negative Declaration.

_____ No mitigations will be attached.

_____ Environmental Impact Report
(Your project may have a significant effect on the environment. An EIR must be prepared to address the potential impacts.)

As part of the environmental review process required by the California Environmental Quality Act (CEQA), this is your opportunity to respond to the preliminary determination before it is finalized. Please contact Paia Levine, Environmental Coordinator at (831) 454-3178, if you wish to comment on the preliminary determination. Written comments will be received until 5:00 p.m. on the last day of the review period.

Review Period Ends: **May 17, 2006**

Paia Levine
Staff Planner

Phone: **454-3178**

Date: **April 11, 2006**

NAME: Santa Cruz County Resource Conservation District for owners Izzarelli and Gorley
APPLICATION: 06-0041
A.P.N: 95-181-15, 97-201-16

NEGATIVE DECLARATION MITIGATIONS

A. In order to ensure that the mitigation measures B - E (below) are communicated to the various parties responsible for constructing the project, prior to any disturbance on the property the applicant shall convene a pre-construction meeting on the site. The following parties shall attend: applicant, grading contractor supervisor, Santa Cruz County Resource Planning staff, project biologist, Fall Creek Engineering staff. The temporary construction fencing demarcating the disturbance envelope, staging areas, spoils areas, and tree protection marking will be inspected. The applicant shall provide a copy of the DFG 1600 agreement and NMFS Fish and Wildlife Biological Opinion to be reviewed on site. Results of pre- construction biotic surveys and evidence of worker training will also be collected.

B. In order to avoid impacts to special status plants, prior to issuance of the riparian exception or grading permit the project biologist shall perform properly timed floristic surveys for species listed as potentially occurring in the project area in the California Natural Diversity Database (CNDDB). If the surveys are positive the project plans shall be modified to avoid the special status plants.

C. In order to mitigate impacts to the riparian corridor, prior to issuance of the riparian exception or grading permit, the applicant shall submit a detailed restoration plan for replacement of riparian vegetation that is removed and revegetation of disturbed areas, for review and approval by County staff. The plan shall include: plot plan showing where disturbance will occur and where replacement plants will be planted, species list, and maintenance and monitoring for five years or until success standards are reached. The maintenance plan shall include three years summer irrigation and follow up removal of non -native species for five years. Trees to remain within the disturbance area shall be flagged in advance of any disturbance.

D. In order to reduce potential impacts to wildlife resources (special status birds, amphibians and fish) to a less than significant level, the applicant shall:

1. Implement all recommendations of the Biotic Assessment (Gilchrist and Associates, January 17, 2006, the final NMFS Biological Opinion (BO), and DFG stream alteration agreement. These recommendations include: project work period August 1 – October 15, pre- construction wildlife surveys, monitoring by a qualified biologist during initial clearing, vegetation removal, ford removal, and channel grading, and worker training;

2. Prior to issuance of the Riparian Exception or grading permit the stream diversion plan and biologic monitoring schedule shall be modified to conform to the final BO and the Biotic Assessment. Water pumped from the upstream side of the diversion dam shall be pumped to a tank or an upland area, or filtered prior to return to the stream. The project fish biologist shall visit the site twice weekly.

E. In order to prevent impacts from erosion and sedimentation, prior to issuance of the Riparian Exception or grading permit the applicant shall revise the erosion control plan to include the following:

1. plot plan showing disturbance envelope (to be marked in the field as well) and approved spoils area,
2. indicate how spoils from drilling will be collected and disposed of outside the riparian area,
3. construction schedule including approximate number of days required for each phase of work and overall schedule to begin after August 1 and end by October 15;
4. list of seeds to be approved by project biologist and use of clean rice straw only.

Environmental Review
Initial Study

Application Number: 06-0041

Date: April 10. 2006
Staff Planner: Paia Levine

I. OVERVIEW AND ENVIRONMENTAL DETERMINATION

APPLICANT: Santa Cruz County Resource Conservation District

APN: 95-181-15, 97-201-06

OWNERS: Dana and Carol Izzarelli
Kenneth and Paula Gorley

SUPERVISORIAL DISTRICT: 1

LOCATION: Terminus of Tucker Road, east of Highway 17, at Soquel Creek.

SUMMARY PROJECT DESCRIPTION: Proposal to replace a concrete at-grade stream crossing with a bridge over Soquel Creek. The proposed bridge is 120 feet long and will pass the 100-year flood event The primary purpose is to facilitate fish passage for endangered species, however the project will also provide more reliable access to the residential parcels east of the creek. Requires a grading permit, Riparian Exception, Biotic Report Review and Engineering Report review.

ALL OF THE FOLLOWING POTENTIAL ENVIRONMENTAL IMPACTS ARE EVALUATED IN THIS INITIAL STUDY. CATEGORIES THAT ARE MARKED HAVE BEEN ANALYZED IN GREATER DETAIL BASED ON PROJECT SPECIFIC INFORMATION.

x	Geology/Soils		Noise
x	Hydrology/Water Supply/Water Quality	X	Biotic Resources
	Energy & Natural Resources	X	Public Services & Utilities
	Visual Resources & Aesthetics		Land Use, Population & Housing
	Cultural Resources		Cumulative Impacts
	Hazards & Hazardous Materials		Growth Inducement
x	Transportation/Traffic		Mandatory Findings of Significance

DISCRETIONARY APPROVAL(S) BEING CONSIDERED

____	General Plan Amendment	__X__	Grading Permit
__X__	Biotic Approval	__X__	Riparian Exception
____	Rezoning	____	Other:
____	Development Permit	____	
____	Coastal Development Permit	____	

NON-LOCAL APPROVALS

Other agencies that must issue permits or authorizations: California Department of Fish and Game (DFG), and possibly Regional Water Quality Control Board (RWQCB), U.S National Marine Fisheries Service (NMFS), and US Fish and Wildlife Service (FWS).

ENVIRONMENTAL REVIEW ACTION

On the basis of this Initial Study and supporting documents:

___ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

__Y__ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the attached mitigation measures have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.

___ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

Paia Levine

Date 4-12-06

For: Ken Hart
Environmental Coordinator

II. BACKGROUND INFORMATION

EXISTING SITE CONDITIONS
Parcel Size: 37.6 acres
Existing Land Use: Concrete at grade ford serving approximately 3 dwellings
Vegetation: Riparian woodland and understory
Slope in area affected by project: _x__ 0 - 30% ___ 31 – 100%
Nearby Watercourse: West Branch Soquel Creek
Distance To: Proposed bridge crosses the creek

ENVIRONMENTAL RESOURCES AND CONSTRAINTS

Groundwater Supply: No
Water Supply Watershed: Yes
Groundwater Recharge: No
Timber or Mineral: Timber Resource
Agricultural Resource: No
Biologically Sensitive Habitat: Yes
Fire Hazard: No
Floodplain: Yes
Erosion: Yes
Landslide: Yes, mapped on County LS map

Liquefaction: Not indicated
Fault Zone: County FZ, Zayante
Scenic Corridor: Not mapped
Historic: None
Archaeology: Yes, mapped
Noise Constraint: No
Electric Power Lines: No
Solar Access: NA
Solar Orientation: NA
Hazardous Materials: No

SERVICES

Fire Protection: CDF
School District: NA
Sewage Disposal: NA

Drainage District: NA
Project Access: Tucker Rd
Water Supply: NA

PLANNING POLICIES

Zone District: TP, SU
General Plan: Mountain Residential
Urban Services Line: ___ Inside __X__ Outside
Coastal Zone: ____Inside __X__ Outside

Special Designation: None

PROJECT BACKGROUND:

The Tucker Road ford is a fish passage impediment for endangered species, a potential barrier to the movement of woody debris which is beneficial to wildlife, and a sediment source to Soquel Creek. The primary purpose of this project is to improve fish passage by removing the ford. In addition, replacement of the ford with a clear span bridge will have beneficial impacts on woody debris movement and will drastically reduce the sediment inputs currently resulting from maintenance of the ford.

The project represents the culmination of more than five years of planning and studies. The three key planning efforts are:

- *Soquel Watershed Assessment and Enhancement Plan (*SCCRCD 2003*);*
- The Santa Cruz County Integrated Watershed Restoration Program (IWRP); and
- The Natural Resource Conservation Service (NRCS) Environmental Quality Incentives Program (EQIP).

Replacement of this ford with a bridge is a Priority 1 project in the Soquel Creek Watershed Plan and has been identified by the California Department of Fish and Game and the National Marine Fisheries Service as an important beneficial project.

The project has been designed and will be implemented in accordance with the California Department of Fish and Game's (DFG) *California Salmonid Stream Habitat and Restoration Manual* and in coordination

with National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) and DFG.

DETAILED PROJECT DESCRIPTION:

The project will remove an existing at grade concrete ford. The ford will be replaced by a 120-foot span bridge that will pass the 100-year flood event. The presence of bedrock in the downstream reach should provide substantial grade control once the ford is removed. The channel upstream of the ford will be reshaped to a 3% slope to form and restore the former channel morphology. Channel banks will be shaped to a minimum 2:1 slope, stabilized with temporary erosion control measures and revegetated. Other areas disturbed by construction will also be revegetated. A stream bypass will be constructed and no heavy equipment will be operated within the live stream channel.

All project construction, restoration, and grading activities will take place on or after August 1st pursuant to DFG guidelines as to avoid any potential impacts to breeding California red-legged frogs or nesting/breeding raptors and riparian birds. Restoration, construction, fish relocation, and dewatering activities within any wetted and/or flowing creek channel shall be completed no later than October 15th. Revegetation outside of the active channel will continue beyond October 15 until November 15, as necessary.

A temporary material staging area will be set up on the north side of Tucker Road and on the west side of Soquel Creek. This area is already disturbed with a garden and raised beds, so no native vegetation will need to be removed. To reduce congestion on the narrow Sugerloaf and Tucker Roads, and parking problems at the job site, some workers will park vehicles at the pullout along Highway 17 and Sugarloaf Road and carpool to the site.

Project site dewatering will be coordinated with a qualified biologist to perform fish, amphibian, and reptile relocation activities. Prior to dewatering qualified individuals will capture and relocate fish, amphibians, and reptiles which must be captured and relocated to avoid mortality and minimize take. Initial fish relocation efforts will be conducted for several days prior to the start of construction. This will provide the fisheries biologist an opportunity to return to the work area and perform additional electrofishing passes. Rescued fish shall be moved to the nearest appropriate site on the W. Branch of Soquel outside the work area.

After the site is cleared of fish, a temporary water diversion system will be set up to divert Soquel Creek flows around the construction zone. Diverted water will be discharged downstream of the construction site into the active channel. The intake pipe shall be fitted with a fish screen meeting DFG and NMFS criteria to prevent entrainment or impingement of small fish. Any turbid water from the site shall be pumped to an upland filtration basin where it does not drain directly into the stream channel.

Prior to the installation of the new bridge, the existing concrete ford and sections of the existing road will be removed. The existing concrete ford is roughly 31 feet long by 42 feet wide and four feet in depth at its deepest observed point. Approximately 83 feet of roadway on the north and 37 feet of roadway on the south side of the crossing will also be demolished and removed from the site to an approved location. Approximately 285 cubic yards of concrete debris will be removed from the site.

In order to reshape the upstream channel approximately 215 feet of channel will be graded. Preliminary grading calculations indicate that approximately 400 cubic yards of sediment will be removed. The channel banks will be shaped and then stabilized with temporary erosion control measures (blankets and wattles) and later revegetated with willow and alder trees, and native understory species. All sediment not re-used during channel grading will be transported off-site to an approved sediment disposal location. The work areas will be delineated by temporary fencing. All non-native understory vegetation in the construction zone and immediate vicinity of the project site will be removed.

Native riparian trees and understory vegetation removed will be replanted on a minimum 3:1 basis. Native species will be planted on all areas disturbed by construction, including the any temporary access

road(s), and lower bank slopes presently unvegetated due to bank erosion or scour. Revegetation will take place following the completion of all construction activities and will not proceed beyond November 15th.

The proposed bridge is a three-pin design. The bridge deck will be installed in two sections, a 40-foot section connected to an 80-foot long deck. The substructure will consist of six piers, including two sets of piers on both ends and a set of piers to support and connect the 80 and 40-foot deck sections. The intermediate set of piers have been located outside of the active, mean bankful channel. The piers will be drilled at least 18 feet into the bedrock. The holes for the piers will be drilled using a caisson drill that will use either an auger or rotary type drill capable of drilling at least 36-inch diameter hole. A concrete grade beam will be formed on top of the piers and the bridge deck will sit on the grade beams. A crane will be used to set the bridge decks on the piers.

The height of the bridge deck is at least two feet higher than the 50-year return flow and above the 100-year peak flood event.

Once the bridge spans are in-place two approach ramps will be constructed and supported by retaining walls. The approach ramps will have a clear width of 14 feet and will extend outward from of the newly constructed bridge to meet the 95.5 foot contour. The north side of the crossing will require the construction of a 12 foot long approach ramp that is 2.5 feet high at its highest point. No retaining walls will be necessary for the northern approach ramp. The south side of the crossing will require the construction of a 21 foot long approach ramp that is 4 feet high at its highest point. The retaining walls on this side of the bridge will be approximately 5.5 feet high to allow for an 18-inch curb, which will be fitted with a 42-inch high railing.

The entire bridge construction project should take between four to six weeks to complete.

III. ENVIRONMENTAL REVIEW CHECKLIST

A. Geology and Soils

Does the project have the potential to:

		Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
1.	Expose people or structures to potential adverse effects, including the risk of material loss, injury, or death involving:				
	A. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or as identified by other substantial evidence?			x	
	B. Seismic ground shaking?			x	
	C. Seismic-related ground failure, including liquefaction?			x	
	D. Landslides?			x	

A geologic field investigation of the location of the Zayante Fault was prepared by Balance Hydrologics, November 28, 2005 (Attachment 4). The assessment concluded that the fault is inaccurately mapped on the County fault map and that the Zayante Fault is actually 500-600 ft south, southwest of the project site. The assessment concludes that there is no evidence to suggest that fault rupture will occur through the bridge alignment though it could occur in the vicinity. A geotechnical investigation was prepared by Bauldry Engineering, January 24, 2006 (Attachment 5). That assessment concluded that significant seismic shaking will occur during the lifetime of the project. Adherence to the California Building Code and specific recommendations in the geotechnical report, which are incorporated into the plans, will reduce the impact to less than significant. In addition, the report concluded that the potential for localized landsliding to occur and directly impact the bridge is low. These reports have been reviewed and accepted by the County Geologist (Attachment 7).

2.	Subject people or improvements to damage from soil instability as a result of on- or off-site landslide, lateral spreading, subsidence, liquefaction, or structural collapse?			x	

The geotechnical report (Bauldry Engineering, January 24, 2006, Attachment 5). concluded that there is a potential risk from liquefaction and scour. The recommendations contained in the geotechnical report (ensuring that bridge piers be embedded in the bedrock) to mitigate for this potential hazard have been incorporated into the plans.

3.	Develop land with a slope exceeding 30%?			x	

There are slopes that exceed 30% on the property. However, no improvements are proposed on slopes

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
in excess of 30%.				
4. Result in soil erosion or the substantial loss of topsoil?		x		

There is a potential for erosion and sedimentation during the construction and grading phases of the project, however, this potential is proposed to be controlled by an extensive series of Best Management Practices (BMPs) which have been largely been incorporated into the project. Any BMPs that have not been incorporated will be added to the revised erosion control plan, which is required to be approved prior to issuance of the Riparian Exception, or a grading or building permit. These BMPs include: a stream bypass installed according to the direction of DFG, revegetation of all bare soils, management of spoils to prevent them from entering the creek, specification of all seeds and plants to prevent introduction on non native species, and a construction schedule that includes completion of all earthwork prior to October 15.

5. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code(1994), creating substantial risks to property?			x	

The geotechnical report for the project did not identify any elevated risk associated with expansive soils

6. Place sewage disposal systems in 7areas dependent upon soils incapable of adequately supporting the use of septic tanks, leach fields, or alternative waste water disposal systems?				x
7. Result in coastal cliff erosion?				x

B. Hydrology, Water Supply and Water Quality

Does the project have the potential to:

1. Place development within a 100-year flood hazard area?			x	

The Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Map, dated April 15, 1986 does not provide information for this uppermost section of Soquel Creek (Attachment 9). The base flood level (BFE), or 100 year flood elevation, was therefore determined specifically for the site in the project hydrologic report "Hydraulic and Scour Analysis", prepared by Fall Creek Engineering, January 24, 2006 (Attachment 6). The base flood elevation (BFE) is approximately 91 feet, based on project benchmarks. The bridge, with an elevation of 94 feet at the bottom of the deck, has been designed to pass the 100 year flood with three feet of freeboard. The approaches and associated short retaining walls are also outside (above) the BFE.

A significant amount of sediment will be removed from the channel that has accumulated behind the ford, and the ford itself will be removed. These actions, along with steepening the profile of the channel, will increase the conveyance area for flood waters. The intermediate pier will be below the BFE, however it is outside the mean bankful channel and the volume it represents is offset by the removal of material in the same location.

The hydraulic assessment for the project confirms that there will be no offsite negative impacts to the flood pattern as a result of the project. In addition, the California Department of Fish and Game hydraulic engineer has commented favorably on the design (letter of Marcin Whitman, DFG, March 9, 2006,

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
Attachment 8).				
2. Place development within the floodway resulting in impedance or redirection of flood flows?			x	

As noted above, conveyance at the project site will increase as a result of the project. An impediment to flow is being removed, and the new bridge is designed to pass the 100 year flood as well as the expected debris load. Overall, the conveyance through this reach will be improved as a result of the project. Also refer to B-1.

3. Be inundated by a seiche or tsunami?				x
4. Deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit, or a significant contribution to an existing net deficit in available supply, or a significant lowering of the local groundwater table?			x	

The only use of water will be summer, drip irrigation of restoration plantings for two years or until they are established. This will not significantly lower the groundwater table or aggravate an existing water supply shortage.

5. Degrade a public or private water supply? (Including the contribution of urban contaminants, nutrient enrichments, or other agricultural chemicals or seawater intrusion).			x	

The project is within a water supply watershed. The removal of the ford will eliminate a use that has a potential for contamination of surface waters by vehicles and vehicle fluids. The project is therefore expected to have a positive overall effect on instream water quality. Short term water quality impacts due to erosion and sedimentation will be controlled by a stream bypass that is approved by DFG, timing to avoid grading in the wet season, and rigorous erosion control BMPs. A detailed erosion control plan specifying the BMPs and requiring fencing to prevent unauthorized incursions into vulnerable areas will be required for the project. Refer also to section A-4.

6. Degrade septic system functioning?				x
7. Alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which could result in flooding, erosion, or siltation on or off-site?			x	

The project will be increasing the conveyance area available for floodwaters by removing the existing ford, which is approximately 300 cubic yards of concrete, and replacing it with a bridge. The bridge, with an elevation of 94 feet at the bottom of the deck, has been designed to pass the 100 year flood with three feet of freeboard. The approaches and associated short retaining walls are also outside (above) the BFE. In addition, a significant amount of sediment will be removed from the channel that has accumulated behind the ford. This is expected to have a beneficial impact on the flood pattern.

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
8. Create or contribute runoff which would exceed the capacity of existing or planned storm water drainage systems, or create additional source(s) of polluted runoff?			X	

No new runoff will be generated by the project. Sources of polluted runoff will be decreased by eliminating the ford crossing for vehicles.

9. Contribute to flood levels or erosion in natural water courses by discharges of newly collected runoff?			X	

No new runoff will be generated as a part of the project.

10. Otherwise substantially degrade water supply or quality?			X	

C. Biological Resources

Does the project have the potential to:

1. Have an adverse effect on any species identified as a candidate, sensitive, or special status species, in local or regional plans, policies, or regulations, or by the California Department of Fish and Game, or U.S. Fish and Wildlife Service?		X		

The project area is generally high in wildlife habitat value. Special status species that may use the area include California red legged frog (CRLF), Foothill yellow legged frog (YLF), Western pond turtle (WPT), various species of bats, raptors, and migratory birds, and Steelhead trout. The main goal of the project is to remove a partial barrier to steelhead migration and movement, and, in conjunction with another similar project, open access to several river miles of spawning and rearing habitat. A Biotic Assessment has been prepared by J. Gilchrist and Associates, January 17, 2006, which includes habitat assessment and reconnaissance level surveys for wildlife and vegetation, including a separate fish and stream habitat survey and fish passage analysis (Hagar, February 2, 2005) (Attachment 10). It is important to note that the National Marine Fisheries Service staff and DFG staff have been involved in the design, review, and/or funding of this project. The NMFS anticipates that the project will be covered by an upcoming programmatic Biological Opinion for Fisheries Restoration Projects (Attachment 11).
A summary of the potential for special status wildlife to be present at the site and to breed at the site is given in Table 2, pg 9 of Attachment 10. CRLF not likely to occur but may be found foraging at the site, there is no suitable breeding habitat; YLF may occur and may breed, WPT less likely to occur but may be present and may breed. Protected raptors may occur and may breed in the area. Salmonids do occur and are expected to be present at the site.
The mitigation measures that have been incorporated into the project are specified in the Biotic Assessment and include: start date after August 1 to accommodate migration period of trout, breeding time of birds and YLF; pre-construction surveys for RLF, YLF and WPT; biologist monitoring initial clearing, ford removal and channel grading, with provision for additional monitoring should SWP be found on site; flagging the site to minimize disturbance; pre-construction removal of fish, including dispatch of non natives, and construction of an approved stream bypass; training of staff and periodic professional inspection. Certain other measures, such as increasing the monitoring period of the revegetation program to five years, adding periodic monitoring by a fish biologist, and possibly modifying

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable

the stream bypass to comply with NMFS recommendations, will be added as mitigation measures. Taken together the mitigation measures reduce the potential impacts on wildlife to a less than significant level.

2.	Have an adverse effect on a sensitive biotic community (riparian corridor), wetland, native grassland, special forests, intertidal zone, etc.)?		x		

Vegetation in the area is mixed Redwood upland woodland and riparian vegetation which creates a significant and diverse native riparian canopy and understory. Ten rare plants are listed in the CNDDB as possibly being found in this location although habitat is not ideal and occurrence is unlikely. See Table 1 of Appendix, Attachment 10 for a list of these plants. Reconnaissance surveys performed in late winter and early spring did not identify any individuals of these species, however properly timed floristic survey is necessary to ensure no individuals are present. This survey is required to be performed in spring/summer 2006. In the unlikely event individuals are found the project will be revised to avoid the plants.

3.	Interfere with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native or migratory wildlife nursery sites?			x	

The project will have a significant positive effect on the movement of fish, in that the purpose of the project is removal of a substantial barrier to fish passage. The result of this project, when combined with other barrier removal projects downstream, is the opening up of several miles of habitat to salmonids for spawning and rearing.

4.	Produce nighttime lighting that will illuminate animal habitats?			x	

No new sources of illumination are proposed.

5.	Make a significant contribution to the reduction of the number of species of plants or animals?			x	

Refer to C-1 and C-2 above.

6.	Conflict with any local policies or ordinances protecting biological resources (such as the Significant Tree Protection Ordinance, Sensitive Habitat Ordinance, provisions of the Design Review ordinance protecting trees with trunk sizes of 6 inch diameters or greater)?			x	

Several trees that are in the riparian corridor and proximal to the existing road will be removed in order to accommodate the new bridge and the sediment removal from the channel. Some willows and riparian understory will be removed in order to accomplish the grading upstream of the ford which will return the channel to its' original geometry. Wildlife (Steelhead, California Red legged frogs, Yellow legged frogs, and Southwestern pond turtles) may be handled and relocated out of the work area as necessary. These impacts will be mitigated by replacement of vegetation with native riparian species that will be beneficial to the wildlife in the corridor and the creek. Trees will be replaced at a 3:1 ratio. Erosion

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable

control methods will utilize willow stakes, which also will create habitat. Special status wildlife will be avoided or removed from the work area by qualified biologists in accordance with the provisions of a valid federal Biological Opinion and DFG Stream Alteration Agreement. These measures, combined with protective fencing of undisturbed area, minimization of the disturbance in the first place, and the purpose of the project, which is to benefit endangered species by facilitating migration, place the project in compliance with local policies and ordinances.

7.	Conflict with the provisions of an adopted Habitat Conservation Plan, Biotic Conservation Easement, or other approved local, regional, or state habitat conservation plan?	_____	_____	x	_____

There are no such easements or plans in effect.

D. Energy and Natural Resources

Does the project have the potential to:

1.	Affect or be affected by land designated as "Timber Resources" by the General Plan?	_____	_____	x	_____

The project is adjacent to land designated as Timber Preserve. However, the project will have no effect on the timber resource or access to harvest the resource in the future.

2.	Affect or be affected by lands currently utilized for agriculture, or designated in the General Plan for agricultural use?	_____	_____	x	_____

The project site is not currently being used for agriculture and no agricultural uses are proposed for the site or surrounding vicinity.

3.	Encourage activities that result in the use of large amounts of fuel, water, or energy, or use of these in a wasteful manner?	_____	_____	x	_____
4.	Have a substantial effect on the potential use, extraction, or depletion of a natural resource (i.e., minerals or energy resources)?	_____	_____	x	_____

See section D-2 regarding timber resources

E. Visual Resources and Aesthetics

Does the project have the potential to:

1.	Have an adverse effect on a scenic resource, including visual obstruction of that resource?	_____	_____	x	_____

The project site is in the creek bottom with minimal visibility from other locations. No public scenic resources designated in the County General Plan (1994) will be impacted and no public views will be obstructed.

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
2. Substantially damage scenic resources, within a designated scenic corridor or public view shed area including, but not limited to, trees, rock outcroppings, and historic buildings?			x	

The project site is not located along a County designated scenic road or within a designated scenic resource area.

3. Degrade the existing visual character or quality of the site and its surroundings, including substantial change in topography or ground surface relief features, and/or development on a ridge line?			x	

The existing visual setting is riparian woodland and perennial creek. The project includes riparian restoration plantings to fit into this setting and the bridge structure itself has no center pier and is not particularly visually intrusive.

4. Create a new source of light or glare which would adversely affect day or nighttime views in the area?			x	

No new source of light or glare will be created.

5. Destroy, cover, or modify any unique geologic or physical feature?			x	

There are no unique geological or physical features on or adjacent to the site that would be destroyed, covered, or modified by the project.

F. Cultural Resources

Does the project have the potential to:

1. Cause an adverse change in the significance of a historical resource as defined in CEQA Guidelines 15064.5?			x	

The only existing structure that will be modified is the ford, which is not designated as a historic resource on any federal, State or local inventory. The ford was investigated for historic significance by a Cultural Resources Specialist for the Natural Resources Conservation Service, part of the U.S. Department of Agriculture, and it was determined that there is no evidence that the ford may meet criteria for placement on the National Register of Historic Places. Please refer to letter of Frank Dietz, January 26, 2006 (Attachment 12).

2. Cause an adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines 15064.5?			x	

There is no evidence of pre-historic cultural resources in the disturbance area. The Cultural Resources Specialist for the Natural Resources Conservation Service also found no indication of prehistoric cultural resources in the record (Attachment 12). Lastly, resources are highly unlikely to occur in the active channel and the mobile floodplain area. However, pursuant to Section 16.40.040 of the Santa Cruz County Code, if archeological resources are uncovered during construction the responsible persons

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable

shall immediately cease and desist from all further site excavation and comply with the notification procedures given in County Code Chapter 16.40.040.

3.	Disturb any human remains, including those interred outside of formal cemeteries?			X	

Refer to section F-2. Further, pursuant to Section 16.40.040 of the Santa Cruz County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this project human remains are discovered the responsible persons shall immediately cease and desist from all further site excavation and notify the sheriff-coroner and the Planning Director. If the coroner determines that the remains are not of recent origin, a full archeological report shall be prepared and representatives of the local Native California Indian group shall be contacted. Disturbance shall not resume until the significance of the archeological resource is determined and appropriate mitigations to preserve the resource on the site are established.

4.	Directly or indirectly destroy a unique paleontological resource or site?			X	

Though there are bedrock outcrops up and downstream of the site there are no indications of paleontologic resources in the disturbance area.

G. Hazards and Hazardous Materials

Does the project have the potential to:

1.	Create a significant hazard to the public or the environment as a result of the routine transport, storage, use, or disposal of hazardous materials, not including gasoline or other motor fuels?			X	

The project is removal of a concrete ford and construction of a bridge. No hazardous materials as defined above are part of the project.

2.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	

The project site is not included on the list of hazardous sites in Santa Cruz County compiled pursuant to the specified code.

3.	Create a safety hazard for people residing or working in the project area as a result of dangers from aircraft using a public or private airport located within two miles of the project site?				X
4.	Expose people to electro-magnetic fields associated with electrical transmission lines?				X

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
5. Create a potential fire hazard?			X	

The associated road work incorporates all applicable fire safety code requirements. Further, the residences on the far side of the ford are currently not accessible to vehicles during storm flows which make the ford impassable. The new vehicle bridge will provide year round emergency access which will greatly improve fire protection as well as other emergency services.

6. Release bio-engineered organisms or chemicals into the air outside of project buildings?				X

H. Transportation/Traffic

Does the project have the potential to:

1. Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			X	

No additional permanent traffic will be generated by the project.
There will be temporary traffic created by the workers and by trucks removing concrete rubble and sediment generated by the earthwork phase of the project. However, the project includes plans to park vehicles at pullouts on Highway 17 and Sugarloaf Rd to minimize construction related trips. The concrete and excess sediment is proposed to be exported to two sites on the project parcels, away from the stream, which will also minimize truck trips on the small, rural road. The location of proposed fill sites is shown on Attachment 13. Together with the fact that the extra trips will be temporary, the carpooling and the local fill sites cause any impact to be less than significant.

2. Cause an increase in parking demand which cannot be accommodated by existing parking facilities?				X
3. Increase hazards to motorists, bicyclists, or pedestrians?			X	

There will be a temporary increase in construction related trips between Highway 17 and the end of Tucker Rd, however this is not expected to increase traffic conflicts to any significant degree. Refer also to section H-1.

4. Exceed, either individually (the project alone) or cumulatively (the project combined with other development), a level of service standard established by the county congestion management agency for designated intersections, roads or highways?			X	

I. Noise

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
Does the project have the potential to:				
1. Generate a permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			x	

There will be no permanent increase in noise.

2. Expose people to noise levels in excess of standards established in the General Plan, or applicable standards of other agencies?			x	
3. Generate a temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			x	

Noise generated during construction will increase the ambient noise levels for adjoining areas. Construction will be temporary, however, and given the limited duration of this impact it is considered to be less than significant.

J. Air Quality

Does the project have the potential to:

1. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			x	

The project is of modest scope: it will not generate new traffic, involve grading of more than a very small area, or use many pieces of heavy, diesel burning equipment.
Additionally, standard dust control BMPs will be implemented during construction to reduce impacts to a less than significant level.

2. Conflict with or obstruct implementation of an adopted air quality plan?			x	

The project will not conflict with or obstruct implementation of the regional air quality plan. See J-1.

3. Expose sensitive receptors to substantial pollutant concentrations?			x	

See J – 1.

4. Create objectionable odors affecting a substantial number of people?			x	

K. Public Services and Utilities

Does the project have the potential to:

1. Result in the need for new or physically altered public facilities, the construction of which could cause significant environmental				

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
a. Fire protection?			x	

Response time and emergency services will be enhanced by the new bridge.

b. Police protection?			x	

Response time and emergency services will be enhanced by the new bridge.

c. Schools?				x
d. Parks or other recreational activities?				x
e. Other public facilities; including the maintenance of roads?			x	
2. Result in the need for construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			x	
3. Result in the need for construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			x	
4. Cause a violation of wastewater treatment standards of the Regional Water Quality Control Board?				x
5. Create a situation in which water supplies are inadequate to serve the project or provide fire protection?			x	
6. Result in inadequate access for fire protection?			x	

There are four parcels and up to five residences on the far side of the ford. The residences are currently not accessible to vehicles on a regular basis when even relatively small recurrence interval storm events

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable

make the ford impassable. During those times a rickety pedestrian bridge is the sole access. This deficient situation, which occurs every winter and spring, will be permanently corrected by the bridge.

There will be a period of time during construction (approximately 4-6 weeks) when there will be no vehicle access. Though this time period occurs during the summer when there is usually access, it is not considered to be a significant impact. The benefit of reliable, all weather emergency vehicle access is far greater than the limited impact of six weeks of pedestrian only access.

Emergency service providers will be notified in advance of the construction period.

7.	Make a significant contribution to a cumulative reduction of landfill capacity or ability to properly dispose of refuse?	_____	_____	x	_____

Concrete rubble and excess fill will be placed on the subject property, away from the creek. Fill placement will meet the provisions of the Grading Ordinance, Chapter 16.22 .Contributions to the landfill will thereby be avoided.

8.	Result in a breach of federal, state, and local statutes and regulations related to solid waste management?	_____	_____	x	_____

L. Land Use, Population, and Housing

Does the project have the potential to:

1.	Conflict with any policy of the County adopted for the purpose of avoiding or mitigating an environmental effect?	_____	_____	_____	_____

The proposed project does not conflict with any policies adopted for the purpose of avoiding or mitigating an environmental effect. The project complies with policies in the General Plan that encourage habitat restoration and require protection of sensitive habitat and sensitive species.

2.	Conflict with any County Code regulation adopted for the purpose of avoiding or mitigating an environmental effect?	_____	_____	_____	_____

The proposed project does not conflict with any regulations adopted for the purpose of avoiding or mitigating an environmental effect. The project complies with the flood regulations in the Geological Hazards Ordinance in that conveyance of the 100 year flood is not compromised and base flood elevation is not increased. Findings for a Riparian Exception can be made pursuant to the Riparian Protection Ordinance, Chapter 16.30. All provisions of the Sensitive Habitat Ordinance, Chapter 16.32, will be met, including requirements to minimize disturbance, restore disturbed riparian habitat, and mitigate impacts to special status species.

3.	Physically divide an established community?	_____	_____	x	_____

The project will better link the residences on the two sides of Soquel Creek.

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
4. Have a potentially significant growth inducing effect, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	

The proposed project replaces an existing substandard access with a safer, environmentally beneficial alternative. It does not create new access, increase density or intensity of land use. The proposed project will not extend the road or increase its capacity.

5. Displace substantial numbers of people, or amount of existing housing, necessitating the construction of replacement housing elsewhere?			X	

M. Non-Local Approvals

Does the project require approval of federal, state, or regional agencies? Yes x No ____

The project requires a section 1600 Stream Alteration Agreement (DFG), must fit within the Biological Opinion issued by federal resource agencies, (NMFS, FWS), and may require approvals from California Regional Water Quality Control Board and the US Army Corps of Engineers.

N. Mandatory Findings of Significance

1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant, animal, or natural community, or eliminate important examples of the major periods of California history or prehistory? Yes ____ No x

2. Does the project have the potential to achieve short term, to the disadvantage of long term environmental goals? (A short term impact on the environment is one which occurs in a relatively brief, definitive period of time while long term impacts endure well into the future) Yes ____ No x

3. Does the project have impacts that are individually limited, but cumulatively considerable ("cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, and the effects of reasonably foreseeable future projects which have entered the Environmental Review stage)? Yes ____ No x

4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? Yes ____ No x

TECHNICAL REVIEW CHECKLIST

	REQUIRED	COMPLETED	N/A
Agricultural Policy Advisory Commission (APAC) Review			x
Archaeological Review			x
Biotic Report/Assessment		X	
Geologic Hazards Assessment (GHA)			x
Geologic Report		x	
Geotechnical (Soils) Report		x	
Riparian Pre-Site			x
Septic Lot Check			x
Other:			
Historic Resource Assessment		x	
Hydraulic Report Review		x	

Attachments:

1. Vicinity Map
2. Assessors Parcel Map
3. Project Plans
4. Excerpts from Zayante Fault Field Assessment, Balance Hydraulics, Inc., November 28, 2005.
5. Excerpts from Geotechnical Investigation, Bauldry Engineering, Inc., June 30, 2005.
6. Hydraulic and Scour Analysis, Fall Creek Engineering, January 24, 2006 and addendum letter, April 11, 2006.
7. Technical report review letter, Joe Hanna, County Geologist, dated April 11, 2006
8. Letter of Marcin Whitmen, Department of Fish and Game Hydraulic Engineer, March 9, 2006.
9. FEMA Flood Insurance Rate Map for project area
10. Biotic Assessment, J. Gilchrist and Associates, January 2006.
11. Memo of John Ambrose, NMFS, March 6, 2006.
12. Memo regarding historic resources investigation, Frank Dietz, NRCS, January 26, 2006.
13. Location of Proposed Fill Sites

Other technical reports or information sources used in preparation of this Initial Study

Soquel Watershed Assessment and Enhancement Plan (SCCRCD 2003)